

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* JEFFREY A. GIACOMEL

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Appeal No. 2006-1173  
Application No. 09/650,335

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ON BRIEF

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Before FRANKFORT, OWENS, and FETTING, *Administrative Patent Judges*.  
OWENS, *Administrative Patent Judge*.

*DECISION ON APPEAL*

This appeal is from a rejection of claims 1, 2, 4, 6, 7, 9, 11, 20, 24-29, 31-33 and 35. Claims 30 and 34, which are all of the other pending claims, stand objected to but allowable if rewritten in independent form.

*THE INVENTION*

The appellant claims an apparatus for rapidly changing the temperature of a mass of product such as a food product. Claim 1 is illustrative:

Claim 1. An apparatus for rapidly changing the temperature of a mass of product, comprising:

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at least two input heat transfer elements for extending into the mass of product, the input heat transfer elements being in parallel spaced planes;

at least one output heat transfer element in thermal contact with the input heat transfer elements and exposed to an ambient temperature environment to transfer thermal energy between the product mass and the ambient temperature environment, said at least two input heat transfer elements having a coating to facilitate cleaning.

#### *THE REFERENCES*

Linger	3,632,982	Jan. 4, 1972
Reed	3,996,847	Dec. 14, 1976
Snyder	5,488,897	Feb. 6, 1996

#### *THE REJECTIONS*

The claims stand rejected as follows: claim 9 under 35 U.S.C. § 112, first paragraph, enablement requirement; claims 1, 4, 6, 7, 24, 31, 33 and 35 under 35 U.S.C. § 102(b) as anticipated by Snyder; claims 25-27 under 35 U.S.C. § 103 as obvious over Snyder; claim 9 under 35 U.S.C. § 103 as obvious over Snyder in view of Linger; claim 11 under 35 U.S.C. § 102(b) as anticipated by Reed; claims 28 and 29 under 35 U.S.C. § 103 as obvious over Reed; and claims 2, 20 and 32 under 35 U.S.C. § 103 as obvious over Reed in view of Snyder.<sup>1</sup>

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<sup>1</sup>In the event of further prosecution the examiner should consider rejecting claim 1, from which claim 2 depends, over Reed in view of Snyder.

OPINION

The rejection of claim 9 under 35 U.S.C. § 112, first paragraph, enablement requirement, is reversed. The rejection of claims 1, 4, 6, 7, 24, 31, 33 and 35 under 35 U.S.C. § 102(b) over Snyder is affirmed as to claims 1, 4, 6, 7, 24, 31 and 35, and reversed as to claim 33. The rejection of claims 25-27 under 35 U.S.C. § 103 over Snyder is affirmed. The rejection of claim 9 under 35 U.S.C. § 103 over Snyder in view of Linger is reversed. The rejections of claim 11 under 35 U.S.C. § 102(b) over Reed, claims 28 and 29 under 35 U.S.C. § 103 over Reed, and claims 2, 20 and 32 under 35 U.S.C. § 103 over Reed in view of Snyder, are affirmed.

*Rejection under 35 U.S.C. § 112, first paragraph, enablement requirement*

The examiner argues (answer, pages 3-4):  
The mass of product will typically have a mean temperature, a bulk property that will vary constantly, and would be difficult to accurately measure except under controlled circumstances with sophisticated equipment. No disclosure is provided of the means necessary (an insulated compartment to isolate the apparatus, the pan, and the mass of product from the environment in order to permit it to reach a steady state, uniform temperature), or of the technique required to create such a thermodynamic "steady state" in which the monitored temperature can be said to "accurately" reflect the temperature of the product.

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A specification complies with the 35 U.S.C. § 112, first paragraph, enablement requirement if it allows those of ordinary skill in the art to make and use the claimed invention without undue experimentation. See *In re Wright*, 999 F.2d 1557, 1561, 27 USPQ2d 1510, 1513 (Fed. Cir. 1993); *Atlas Powder Co. v. E.I. du Pont De Nemours & Co.*, 750 F.2d 1569, 1576, 224 USPQ 409, 413 (Fed. Cir. 1984).

The appellant's claim 9 requires a temperature monitor for monitoring a temperature of a heat transfer element, wherein the temperature is an accurate measurement of the temperature of the mass of product. Contrary to the examiner's argument, the claim does not require measurement of the mass of product's mean temperature. The examiner has not provided evidence or reasoning which shows that the appellant's disclosure would not have enabled one of ordinary skill in the art, without undue experimentation, to make and use an apparatus having a temperature probe for accurately measuring the temperature of a mass of product at least in the region of the temperature probe. Accordingly, we reverse the rejection under 35 U.S.C. § 112, first paragraph, enablement requirement.

*Rejection under 35 U.S.C. § 102(b) over Snyder*

Snyder discloses a cooking grid (10) having a series of upwardly extending peaks such as parallel rails (10R) separated by a series of valleys constituted by parallel channels (10C) (col. 5, lines 1-4).

The appellant argues, with respect to claim 1, that Snyder discloses what the examiner refers to as parallel ridges, and does not disclose elements in parallel spaced planes (reply brief, page 3). As shown in Snyder's figure 1, the parallel rails are in parallel spaced planes.

Regarding claims 1 and 24, the appellant argues that Snyder's parallel rails cannot be placed in a mass of product without the base of the grid below the rails, which the examiner relies upon as corresponding to the appellant's output heat transfer element, also extending into the mass of product (reply brief, page 3). A mass of product (30) in Snyder's figure 1 can be pushed downward so that the parallel rails, but not the base of the grid, extend into the mass of product, such that the base is capable of functioning as an output heat transfer element.

The appellant argues that claim 4 requires input heat transfer elements having pan contacting surfaces which are not

disclosed by Snyder (reply brief, page 3). The upper surfaces of Snyder's parallel rails in figure 1 are capable of being placed in contact with a pan.

The appellant argues, with respect to claims 31 and 35, that the appellant's specification (page 12, lines 25-28) defines "length" as the dimension of the input heat transfer elements that extends away from the output heat transfer elements and into the mass of product (reply brief, pages 3-4). That portion of the specification describes an embodiment in which the input heat transfer elements' fins have lengths equal to the depth of a pan. That portion, however, does not limit the term "length" to that embodiment. Thus, the term "length", given its broadest reasonable meaning in view of the appellant's specification, see *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989); *In re Sneed*, 710 F.2d 1544, 1548, 218 USPQ 385, 388 (Fed. Cir. 1983), encompasses the length along Snyder's parallel rails.

We therefore are not convinced of reversible error in the examiner's rejection of claims 1, 4, 6, 7, 24, 31 and 35 under 35 U.S.C. § 102(b) over Snyder.

Claim 33 requires that the apparatus further comprises a pan, and that the at least two heat transfer elements are for extending into the mass of product within the pan. The examiner

relies upon Snyder's chamber 22 as corresponding to the appellant's pan (answer, page 4). The examiner argues that claim 33 requires that the pan is for holding a mass of product, not that the pan is holding a mass of product (answer, page 10). The claim, however, also requires that the at least two heat transfer elements are for extending into the mass of product within the pan. The examiner has not explained how Snyder's parallel ridges are capable of extending into a mass of product within the chamber. Hence, the examiner has not carried the burden of establishing a prima facie case of obviousness of the apparatus claimed in claim 33.

*Rejection of claim 9 under 35 U.S.C. § 103  
over Snyder in view of Linger*

Linger discloses a temperature sensor (46) in the griddle (28) of a cooktop (10) (col. 3, lines 12-13).

The examiner argues that it would have been obvious to one of ordinary skill in the art to add Linger's temperature sensor to Snyder's electrically heated cooking grid for better control of the cooking temperature (answer, page 5). The examiner argues that once the food and the cooking grid reach steady state, the temperature of the grid presumably will be the same as the

temperature of the food (answer, page 11). The examiner, however, has not established that Snyder's grid associated with the widely distributed resistance heaters (116, 316) and food placed on the grid so that certain of the parallel ridges (10R) extend into the food item would reach steady state. Consequently, the examiner has not established a prima facie case of obviousness of the apparatus claimed in the appellant's claim 9.

*Rejection of claims 25-27 under 35 U.S.C. § 103 over Snyder*

The appellant argues that "length" in claims 25 and 26 is the length extending into the mass of product (reply brief, page 5). That argument is not persuasive for the reason given above regarding the rejection of claims 31 and 35 under 35 U.S.C. § 102(b) over Snyder.

As for claim 27, the appellant argues that the tops of Snyder's parallel rails are the only cooking surfaces and, therefore, cannot be considered leading edges extending into a mass of product (reply brief, pages 5-6). Snyder's parallel rails are capable of extending into a mass of product. Hence, the upper surfaces of the parallel rails are capable of being leading edges that extend into a mass of product.



We therefore are not convinced of reversible error in the examiner's rejection of claims 25-27 under 35 U.S.C. § 103 over Snyder.

*Rejection of claim 11 under 35 U.S.C. § 102(b) over Reed*

Reed discloses a device (20) having a plurality of heat conducting fins (21) in spaced rows and, extending downwardly from each fin, rectangular, spaced-apart projecting grills (22) for insertion into food (col. 5, lines 52-68; figures 4-9). Another device (30) can engage the first device, move it above a bun, and cause a hamburger held by the first device to be ejected onto the bun (col. 7, lines 16-24).

The appellant argues that the handle (43) of Reed's device 30 is not removable (reply brief, page 4). The appellant's claim 11 requires a removable handle to move an apparatus comprising input and output heat transfer elements. Reed's projecting grills and heat conducting fins correspond, respectively, to the appellant's input and output heat transfer elements. Reed's entire device 30, which can move device 20 having projection grills and heat conducting fins and is removable from it, is a removable handle for device 20. See, e.g., column 5, lines 11-19 and column 7, lines 16-29 of Reed.

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We therefore are not convinced of reversible error in the examiner's rejection of claim 11 under 35 U.S.C. § 102(b) over Reed.

*Rejection of claims 28 and 29  
under 35 U.S.C. § 103 over Reed*

The appellant argues that "length" in claims 28 and 29 is the length extending into the mass of product (reply brief, page 6). That argument is not persuasive for the reason given above regarding the rejection of claims 31 and 35 under 35 U.S.C. § 102(b) over Snyder.

*Rejection of claims 2, 20 and 32 under  
35 U.S.C. § 103 over Reed in view of Snyder*

The appellant argues that Snyder does not disclose air contact fins (reply brief, page 4). Such fins are disclosed by Reed (col. 5, lines 52-68).

The appellant argues that Reed's lack of a disclosure of a nonstick coating is a teaching away from such a coating (reply brief, page 4). As stated by the Federal Circuit in *In re Gurley*, 27 F.3d 551, 553, 31 USPQ2d 1130, 1131 (Fed. Cir. 1994):

A reference may be said to teach away when a person of ordinary skill, upon reading the reference, would be discouraged from following the path set out in the reference, or would be led in a direction divergent from the path that was taken by the applicant. The degree of teaching away will of course

depend on the particular facts; in general, a reference will teach away if it suggests that the line of development flowing from the reference's disclosure is unlikely to be productive of the result sought by the applicant.

Hence, Reed's mere lack of disclosure of a nonstick coating clearly is not a teaching away from such a coating. Snyder would have fairly suggested, to one of ordinary skill in the art, coating Reed's heat conducting fins with a nonstick coating to obtain the benefit of doing so disclosed by Snyder, i.e., making the fins easier to clean (col. 2, lines 19-20 and 41-43).

The appellant argues, regarding claim 20, that the examiner does not give reasons for rejecting claim 20 with respect to its recitation of rectangular input heat transfer fins (reply brief, page 4). Rectangular input heat transfer fins are disclosed by Reed (col. 5, lines 61-62).

Regarding claim 32 the appellant argues that 1) Reed's projecting grills 22 are not in parallel spaced planes but, rather, are aligned along the same heat conducting fin 21, and 2) if grills 22 of adjacent fins 21 are spaced, the spaced grills both are not in thermal contact with at least one output heat transfer element (reply brief, pages 4-5). Claim 1, from which claim 32 depends, requires that the at least one output heat

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transfer element is in thermal contact with the input heat transfer elements. Neither claim 1 nor claim 32 requires that the input and output heat transfer elements that are in thermal contact also are in physical contact. Because heat transfer can take place between Reed's adjacent projecting grills and heat conducting fins, those grills and fins are in thermal contact.

Therefore, we are not convinced of reversible error in the examiner's rejection of claims 2, 20 and 32 under 35 U.S.C. § 103 over Reed in view of Snyder.

#### *DECISION*

The rejection of claim 9 under 35 U.S.C. § 112, first paragraph, enablement requirement, is reversed. The rejection of claims 1, 4, 6, 7, 24, 31, 33 and 35 under 35 U.S.C. § 102(b) over Snyder is affirmed as to claims 1, 4, 6, 7, 24, 31 and 35, and reversed as to claim 33. The rejection of claims 25-27 under 35 U.S.C. § 103 over Snyder is affirmed. The rejection of claim 9 under 35 U.S.C. § 103 over Snyder in view of Linger is reversed. The rejections of claim 11 under 35 U.S.C. § 102(b) over Reed, claims 28 and 29 under 35 U.S.C. § 103 over Reed, and claims 2, 20 and 32 under 35 U.S.C. § 103 over Reed in view of Snyder, are affirmed.

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

*AFFIRMED-IN-PART*

Charles E. Frankfort

CHARLES E. FRANKFORT )  
Administrative Patent Judge )

Terry J. Owens

TERRY J. OWENS )  
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BOARD OF PATENT  
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